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# The divergence in the tendencies of regional forestry planning in Russia and Belarus. Experience, evaluation and efficiency Trendy rozbieżności w Leśnym Regionalnym Planowaniu w Rosji i na Białorusi.

Doświadczenia, ocena i skuteczność

**Abstract:** This summary presents the methodical aspects of regional forestry planning in Belarus and Russia using the experience of the economic sectoral plan development for Belarusian state forestry institutions and Russian forestry plans of the Smolensk and Kaluga regions. The level of efficiency and accuracy of economic sections of regional forestry plans has been assessed and guidelines for planning improvement have been recommended.

Key words: Belarus, Russia, region, forestry, planning, experience, evaluation, efficiency

**Streszczenie:** Artykuł przedstawia metodyczne aspekty leśnego regionalnego planowania w Białorusi i Rosji korzystając z doświadczeń rozwoju gospodarczego planu sektorowego dla białoruskich leśnych instytucji państwowych i rosyjskich planów leśnictwa smoleńskiego i regionów Kaługi. Poddany został ocenie poziom efektywności i dokładności gospodarczych sekcji regionalnych planów leśnych z rekomendacją poprawy planowania.

Słowa kluczowe: Białoruś, Rosja, region, leśnictwo, planowanie, doświadczenie, ocena, wydajność

#### Introduction

During the last two years the forestry industry organization and management in Russia and Belarus, two neighboring countries, has gone in different ways. While about 95% of the economic entities of the forestry industry are privatized and are privately owned in the Russian Federation, the state remains to be the main leader in this industry in the Republic of Belarus. Naturally, the planning, being the main management function, is realized in different ways. In spite of economical and institutional integration processes that are taking place within the framework of the Union between Belarus and Russia, the Custom's Union, the forming Common Economic Space and the Eurasian Economic Union, the sectoral differences remain distinct. The author of the current article has acquired unique experience in the management of development groups of economical sections of forestry for both the regions of the Russian Federation and Belarusian regions. In 2008 the project of economic sections of forestry planning for the Smolensk region of the Russian Federation was developed. This project was successfully defended in the Federal Forestry Agency, approved by the Ministry of Forestry of the Russian Federation and became valid. In 2010-2011 some methodological guidelines for economic justifications of forest management for Belarusian state forestry institutions were developed and planned amendments of forestry plans of the Kaluga and Smolensk region of Russia were made.

Real-life experience from this work and its implementation gives us the opportunity to evaluate the methodology and efficiency of planning in the Regional Forestry Complex of Belarus and Russia.

# **Evaluation of Regional Forestry Planning in Belarus**

Since the Republic of Belarus gained independence, forestry management changed neither in type of ownership nor in the Regional Planning Management System. However market relations became ingrained in the economic administrative practice and today, for example, timber products are highly sold at the Belarusian Commodity Exchange. This industry has always had significant export opportunities for the realization of forest products and non-timber forest resources, but at the same time it has required imported equipment, vehicles and devices. In addition a certain part of the aforementioned equipment was used in forestry that is now funded through the state budget, the other part of the timber management rests on a selfsupporting basis. All these and some other peculiarities in forestry management complicate the managing functions, especially the planning.

The financial and economic aspects in Regional Forestry Planning of the Republic of Belarus are embodied in the plans of regional industrial forestry associations and in the decade-long projects of state forestry institutions – forestry enterprises – concerned with forestry organization and management The mentioned projects are developed by subsidiaries of the Forest management Republican Unitary Enterprise "Belgosles".

The forestry organization and management projects reflect such aspects and data as: the share of the forest-based sector and forest management in the regional economy; employment in the forest-based sector and forest management of the region; matters of management arrangements of business activity including forest management labor, the costs of forestry units, the needs in the labor force in forestry works, the expenses and earnings of the forestry business and management; the surplus of income over the expenditure of the forestry business; the recoupment of expenses; the sum of state grants.

The quality of the financial and economic sectors of forestry planning is characterized in our opinion by the following key features:

- 1. The structurization, order and sequencing of calculations of financial and economic indicators.
- 2. The full compliance with regulatory documents of the national economy, the industry, the Industrial Forestry Associations (IFA) and State Forestry Agencies (SFA), and forms of statistical reporting.
- The validity and reliability of financial and economic figures based on the exact results of the calculations of the capacity of forest management activities, fixed and circulating assets and human resources for their implementation.

During methodical development for the SFA of the Republic of Belarus in 2010 we have provided the quality improvement of financial and economic sectors of forestry planning. For this purpose the methods of the economic assessment of projects of forestry enterprise organization and management are brought in line with the "Regulations on development of five-year development forecasts of the commercial organizations" approved by the Ministry of Economy of the Republic of Belarus, "Regulations on development of fiveyear development forecasts of the forestry organizations" and "Regulations on one-year development business plans of the forestry enterprise" approved by the Ministry of Forestry of the Republic of Belarus.

The main economic objective of the functioning of State Forestry Agencies stated by us is the expanded reproduction of forest resources on the basis of continuous sustainable forest management, which provides integrated income surplus from all the resources and activities from the expenditure of the SFA for the planned term (ten year period). There is no necessity to give the economic evaluation of the efficiency for the whole period of forest growing and reforestation activities, improvement thinning and salvage felling, forest-protection activities and etc, as the realization of the all the forestry measures according to the detailed project definitely guarantees the stated objective. Because acquiring real profit from ecological, soil and water protection recreational functions and other useful functions of the forest is problematic in the current conditions of economic management, they are not included in revenues.

Herewith it is assumed that the system of forest measures at the project level at least holds and often enhances benefit of these functions and guarantees the main objective. Economic evaluation of the project measures is not carried for the rotation period. The actual and predicted revenues and expenditures for the audit period (a decade) were assessed. In this respect, common financial and economic approaches to their determination and comparison are used. At the same time with such an objective and according to the current management system it is not desirable to use the adaptation of the existing method approaches that are based on: the assessment of land or forest rent; the forest fund valuation; the cadastral valuation of forest land; the estimation of income and costs for the period of up to 100 years about the discounting approach for the whole period of forest growing or cutting rotation, selection of the rate of interest or discount coefficient for the centennial period. Methodological problems of current and major cost sharing are also precluded depending on whether they provide simple or expanded renewal of forest resources. As a result assigned objective and problems by the developers are provided. Thus, the experience of the development of economic sectors of forest management plans suggests the following:

- 1. It is necessary to pay greater attention to planning, including the level of separate individual sector entities of the forest complex.
- 2. It is important to reach clean distinction in the usage and the asset accounting between forestry and the measures of forest management. On this basis it will be possible to improve the quality of the economic sectors of forestry planning, preserving or making changes to the existing balance in the forestry enterprises in these two types of activity.
- Advanced processing of the problems of forestry activities volume and the requirements of the forest consuming industry enterprises is missing and therefore the development of this aspect should be seriously considered.

#### Evaluation of Regional Forestry Planning in Russia

Not only the economy but the whole arrangement system in the forest complex of Russia is modified. At the moment it is legally based on the new Forestry Code of the Russian Federation (No. 200-FZ of November 4, 2006)<sup>1</sup>, that replaced the Forestry Code of 1997. On the basis of this most important judicial document a complete set of legal, regulatory, methodic, projective and normative-technical acts of forest managing was prepared and approved in the last seven years.

As a result the industry of the forest management system was deeply changed and has been assessed to be the most massive one in the last two centuries.

The most important milestones of these reforms are the following:

- Privatization and the transition of economic entities of the forestrybased sector to private ownership (according to some estimates more than 95%).
- b. Instead of 2320 forestry enterprises, 1453 forest areas and 13 forest parks were created with different legal organizational forms: state entity institutions, territory subdivisions of government entity institutions of the Russian Federation
- c. Forming commercial enterprises on the basis of the forestry enterprise property complex for the realization of economic functions. The forms of such organizations are state unitary enterprises, state-run enterprises of autonomous institutions, open joint-stock companies and individual businessmen.

<sup>&</sup>lt;sup>1</sup> Forestry Code of the Russian Federation No. 200-FL of November 4, 2006.

d. Large-scale implementation of lease relations into forest exploitation where the lease of a forest plot becomes the main form of forest use. The priority is given to large scale farm operators that guarantee long term lease, investment in forestry and forest protection, road construction and advanced processing of forest resources.

Macro level planning in the forest-based sector of the economy of the Russian Federation includes chronologically "The Federal Program for the Development of the Forestry Complex of the Russian Federation" for 1995--2005 (approved Decree of the Government of the Russian Federation No. 1123 of November 11, 1995), "Federal Target Program "Forests of Russia" for 1996-2000" developed by order of the Russian Federation government No. A3-P9-17324 of June 13, 1995). Within the framework of the medium term program of Russian social and economic development for 2000-2010 a development strategy was prepared including forestry complex and Federal Target Program "Environmental and Natural Resources of Russia " was approved (2002-2010) with subprogram "Forests" (approved by the government of the Russian Federation No. 8600 of December 7. 2001). After that "the Main Stages of Development" (Order of the Government of the Russian Federation No. 1540-r of November 1. 2002) and "The Concept of Forestry Development of the Russian Federation" (Order of the Government of the Russian Federation No. 69-r of January 18, 2003) were designed.

Nevertheless macro level planning hasn't yet solved all the problems of the forestry sector of the Russian economy.

According to academician N.A. Moiseev they don't eliminate "the negative implications of extensive forestry development that have been around for decades and are connected with the lack of financial support, including forest crop rotation, low level of resource costs that don't provide simple reproduction, extensive forest damage from fire, harmful organisms and forest violation, disorganized economic mechanism"<sup>2</sup>.

One more problem of forestry planning in Russia was the deficiency of regional plans that would be associated with federal plans. Some regions and republics attempted to produce such plans but they were not successful in all of these aspects. There was no balanced system of forestry measures connected with the use of forest resources and the economy.

However in 2007 the Regulation on Regional Forestry Planning of the Russian federation (No. 246 of April 24, 2007)<sup>3</sup> and some other normative documents were adopted that improved the level and the significance of regional forestry planning.

<sup>&</sup>lt;sup>2</sup> N.A. Moiseev, *Ekonomika lesnogo hozyajstva*, Moskovskij Gosudarstvennyj Universitet Lesa, 2006, s. 384.

<sup>&</sup>lt;sup>3</sup> Concerning approval of the Regulation on preparation of the Regional Forest Plan of the subject of the Russian Federation. Order of the Government of the Russian Federation No. 246 of April 24, 2007.

So what did our experience in the development of the forestry planning of the Smolensk region and the adjustment of the forestry plans for the Smolensk and Kaluga regions of Russia show?

In our opinion despite the indisputable quality improvement of the regional forestry planning there are some methodological problems in the economic sections:

- The typical form of the Russian Federation forestry planning approved by the Ministry of Natural Resources of the Russian Federation as of July 16, 2007 (registered in the Ministry of Justice of the Russian Federation No. 10035 August 20, 2007)<sup>4</sup>, is not fully logical and structured, and consists of repetitions in different subdivisions.
- 2. Certain target prediction figures as provided for by the order of the Ministry of Natural Resources of the Russian Federation No.87 of April 11, 2007 "Concerning the approval of target predicted figures and forms of reports about the expenditure of subventions from the federal budget to budgets of the entities of the Russian Federation to exercise certain powers by public authorities of the entities of the Russian Federation in the field of forestry relations and about the achievement of target predicted figures" (registered in the Ministry of Justice of the Russian Federation No.9353 April 26, 2007)<sup>5</sup> are debatable. For example such indicators as the "ratio between 1 m<sup>3</sup> of wood made from cuttings of forest stands and the price rate of wood units fixed by the government of the Russian Federation".
- 3. The balance of income and expenditure of forestry management of the entities of the Russian Federation for the period of more than 3 years has methodological problems with data comparability. This is connected with the fact that in the process of developing the Forestry Planning project in 2008 the expenditures of measures beginning from 2012 and further are calculated according to the prices of the year 2011 that corresponds with the guidelines of the Ministry of Finance of the Russian Federation about making financial plans for the period leading up to 2023 (the letter No.15-08-0613 of May 27, 2008). At the same time the revenues of forestry planning are recommended to be calculated with the use of the annual indexation rate.

Together with the methodological problems of the development project of forestry planning, the Russian Federation faces other known difficulties:

- 1. The lack of regional planning and development programs of the forestry complex and other forest consuming sectors.
- 2. The limitation of the financial and economic informational base of timber procurers, consumers of forest resources and their investment plans.

 <sup>&</sup>lt;sup>4</sup> Typical form of the Russian Federation subject forest plan. Approved by the order of the Ministry of Natural Resources of the Russian Federation No. 182 of July 16, 2007.
<sup>5</sup> About the approval of target forecast indicators and forms of reports about the expenditure of

<sup>&</sup>lt;sup>5</sup> About the approval of target forecast indicators and forms of reports about the expenditure of subventions from the federal budget to budgets of the subjects of the Russian Federation for exercise of certain powers of the Russian Federation by public authorities of the subjects of the Russian Federation in the field of forest relations and about the achievement of target forecast. The order of the Ministry of Natural Resources No.87 of April 11, 2007.

3. The complexity and modification of forms of static reporting of the industry. Right in 2008 in these plans there were radical changes.

Despite methodological and other problems in the economic aspects of regional forestry planning of Russia it is important to note the following positive goals and results:

- Determination for sustained expansion of volumes and indicators of forest use in accordance with the growth of consumption of timber and nontimber forest resources.
- Steady and strong growth of income from the forest use at all levels of the budget system of the Russian Federation with a balanced rate between federal budget income and regional budget income.
- 3. In the behavior of expenditures of forestry management there is specified growth of financing from the Russian Federation with simultaneous growth of expenditures of forest plot landholders.
- 4. Gradual achievement of a positive balance of income and expenditure in forestry managing.
- 5. Positive behaviour of the most important predicted figures for exercising authority in the field of forest relations: levels of forest cutting from 1 hectare covered by forest vegetation; payment size to the Russian Federation budget system from forest use on a per hectare basis, etc.

# Analysis of the Effectiveness and Precision of Regional Forestry Planning as Exemplified by the Smolensk Region of Russia

The efficiency and precision of every plan may be assessed only by comparing the target predicted figures with the attained results. So what did the comparison of the real situation and the prepared economic part of the forestry planning of the Smolensk region of Russia show?

The comparison of the predicted and the achieved figures of the direction of budgetary funds expenditures shows that real expenditure for exercising transferred authority in the field of forest relations in 2009 exceeded expected expenditure by 24,425.5 thousand rubles which amounts to 7%. In total the expenditure growth rate for supporting activity was about 118.4%.

Excess of real expenditures over the expected expenditures for forest protection and renewal activities was not so essential and amounts to 6,387.2 thousand rubles or 2.5%. This dynamic is shown graphically in the diagram (Figure 1).

There are several factors that determine the above-noted tendency:

- 1. The typical for many countries loss of the competitive edge of the forestry industry which uses the extensive models of forest exploitation.
- The decrease in demand for timber and paper-based products on the domestic market and the recession of overall production for the entire list of items produced in the forestry industry.
- 3. Steady increase of payments and rates connected with forest exploitation, production and export of forest products.

4. Insufficient stimulation of sustained forest management on the part of the state.

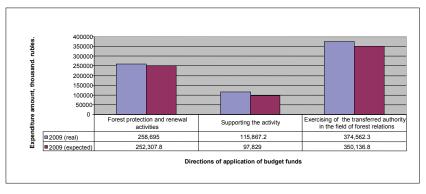
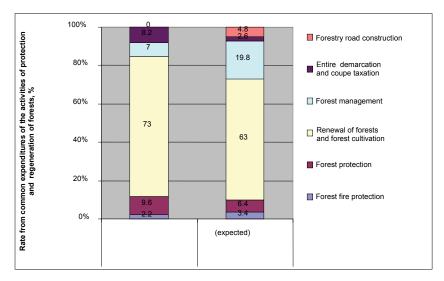
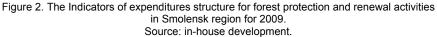


Figure 1. Indicators of expenditure dynamics for exercising of the transferred authority in the field of forest relations in Smolensk region for 2009. Source: in-house development.

The analysis of real and expected structure of expenditures for forest protection and renewal activities (Figure 2) shows disbalance between them with the increase of the ratio of forest renewal and forest cultivation (+10%), forest protection (+3.2%), coupe demarcation and coupe taxation (+5.6%). In addition, the predicted rates of forest road construction and partly of forest management and fire protection were not fully achieved.





In regard to the structure of expenditure financing sources of transferred authority in the sphere of forest relations it is possible to state that the achievement of the predicted figures had insignificant deviations (Figure 3).

The data for the income from the implementation of the forest plan from predicted and achieved income values according to sources is shown in Figures 4 and 5.

The achieved income came short of the predicted level by 10.74% or 12 119 thousand rubles. The generally accepted reason of such an occurrence is crisis phenomena in the economy of the Russian Federation that caused the general stagnation of business and disinvestment in all industries, including forestry.

Income from timber harvesting forms the basis of the income (97.33%), its real value is below the predicted level by 13,691.8 thousand rubles or 12.27%. At the same time income from timber harvesting during clear-cutting exceeded the expected level by 4.05%.

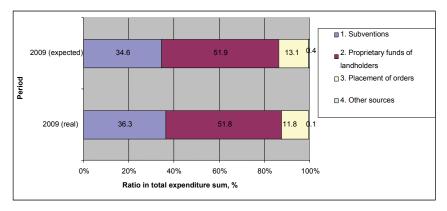


Figure 3. The figures of the structure of expenditure financing sources of transferred authority in the sphere of forest relations in the Smolensk region for 2009. Source: in-house development.

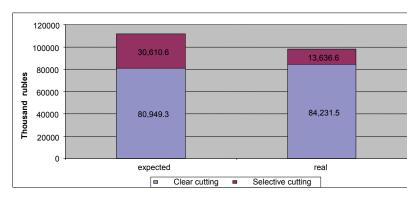
Predicted levels of income were not achieved by the following sources:

- Hunting management and hunting (by 46.67%);
- Agriculture (by 6.25%);
- Cultivation of forest fruit, berries, ornamental and medical plants (by 91.67%);
- Construction and operation of water-reservoirs and other manmade water bodies, water engineering and special-purpose ports (by 22.7%).

Predicted level of income was exceeded by the following sources:

- Recreation (by 13,94%);
- Geological exploration of mineral resources, and development of mineral resource deposits (by 60,31%);

 Construction, reconstruction, and operation of power lines, communication lines, roads, pipelines and other linear utilities (by 7,264.52%).

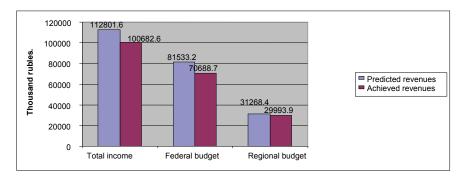


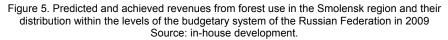
The graphical data is shown in Figure 4.

Figure 4. The predicted and achieved income of budget system of the Russian Federation from timber harvesting in the Smolensk region for 2009 Source: in-house development.

Timber harvesting dominates in the structure of predicted and achieved revenues by making up 98.9% and 97.3% in each field respectively. At the same time the structure of the predicted and achieved revenues has differences: the share in revenues from construction, reconstruction and operation of power lines, communication lines, roads, pipelines and other linear utilities grew in comparison with predicted figures (from 0.015% to 1.274%), the figures of real revenues from recreation grew in comparison with the predicted figures of 0.597% to 0.763%.

Figures 5 and 6 show the predicted and achieved revenues within each level of the budgetary system of the Russian Federation from Forestry Planning activities in 2009.





189

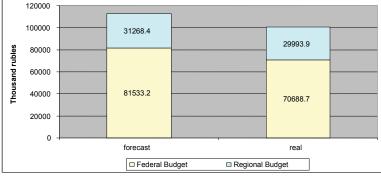


Figure 6. Predicted and achieved revenues distribution form forest use in the Smolensk region within the levels of the budgetary system of the Russian Federation in 2009 Source: in-house development

Thus, it is possible to state that the degree of achievement of calculated economic figures appeared to be sufficiently high. It is indicative of the efficiency of the economic sector of Forestry planning that we have developed in the Smolensk region of Russia.

# Conclusions

- 1. Principal differences in the forms of management in the forestry industry of Russia and Belarus lead to the differences in the system of regional industry planning, including the content of economic sections.
- Economic results in the regional forestry plans of Belarus and Russia methodically have identical features and distinct differences. However in both countries they are hardly admitted to be complete, systematic and scientific.
- 3. The experience of regional forestry planning and management in Belarus should be admitted to be efficient, stable, and having a high degree of management supervision and control. However this can slow down dy-namism, mobility and profitability.
- 4. The experience of regional forestry planning in Russia should be admitted as the most efficient in terms of social and economic region development and those industries that use timber, non-timber forest resources and other useful forest functions. At the same time with such a scale and tempo of changes the system of management and planning at the regional level does not yet function rationally and highly efficiently.
- 5. No economic plans, predictions or projects can be 100% reliable. There is a good reason why planning in market conditions has an indicative nature and not a directive one. In this regard economic science has always recommended having multiple choices and both optimistic and pessimistic variants of plans, projects and predictions.

- 6. Any economic plan, prediction or project needs implementation. World economic cyclicality (not only the occurrence of the financial and economic crisis), economic fluctuations of different countries and regions demand constant adjustments and readjustments. In market conditions, prices, costs, and the needs of forest products or investment resources cannot become stable in the short term, especially in a decade.
- 7. As the implementation and adjustment of the economic sections of the plan, project and predictions are all necessary components of the planning process, it must be carried out regularly. And, naturally, those who know the planning methodology out to be behind the work.

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